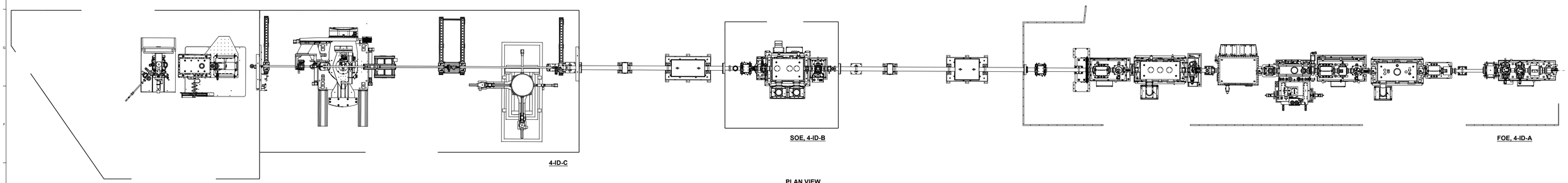
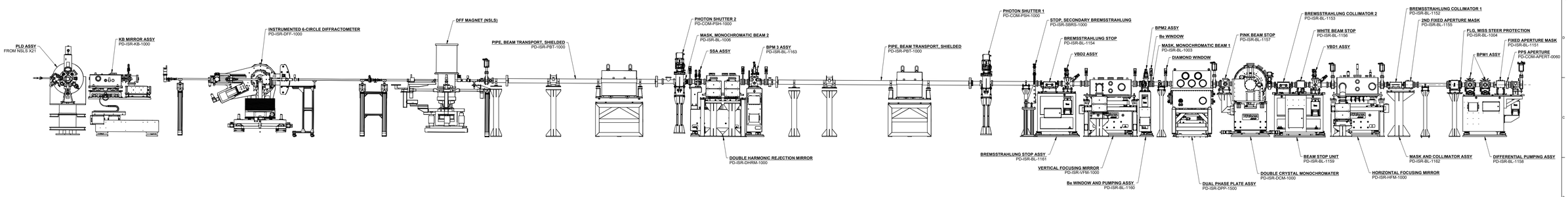
REVISION HISTORY			
REV	DESCRIPTION	DATE	DESIGNER / CHECKED / ENGINEER
A	INITIAL RELEASE PER ECO-00	5/2019	S. LOGUO / A. A / S. SE LUCAS



PLAN VIEW

BEAM DIRECTION



4-ID ELEVATION VIEW

SCALE 1 :20

NEXT ASSY:	PD-ISR-1012
PROJECT:	

UNLESS OTHERWISE SPECIFIED
TOLERANCES ON DECIMALS ARE:
DIMENSIONS IN BRACKETS [xx.x] ARE REFERENCE, NOT TO BE MACHINED

DIMENSIONS ARE IN FOR USE ITU 0 ISO 80 TOLLS ISO 2768

DIMENSIONS: X: ± 1.000 | X: ± 0°
X: ± 0.750
XX: ± 0.400 | 3:2
XXX: ± 0.120

ROUND CORNER & SHARP CORNERS 1/32 MIN, TOLLTB MAX

SCALE: SEE DWG VIEW

snopesGARTS

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DRAWN BY	C. LOGUO	4/12/2019
CHECKED BY	C. AMARETO	5/2019
ENGINEER		
APPROVED BY	M. CLEGG	5/2019
APPROVED BY	J. MELSON	5/2019
APPROVED BY	S. STEELER	5/2019
APPROVED BY	J. ZAPATA	5/2019

WBS# 2.07.02

NSLS II
BROOKHAVEN NATIONAL LABORATORY

PHOTON DIVISION
ISR BEAMLINE
BEAMLINE COMPONENT LAYOUT, 4-ID

PD-ISR-BL-2000 | A

SIZING ROW LEVEL: A2

SHEET 5 OF 5

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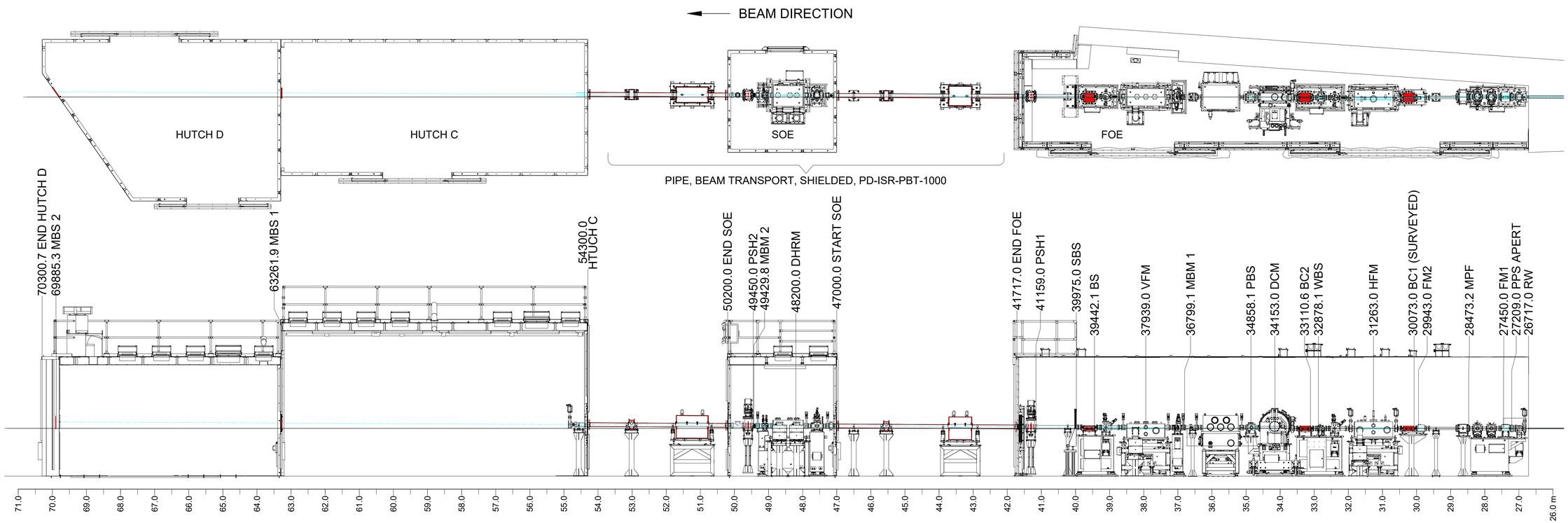
REVISION HISTORY					
REV	DESCRIPTION	DATE	DESIGNER	CHECKED BY	ENGINEER
A	RELEASE PER ECO-003173	4/2016	C.LONGO	C.STELMACH	M.LUCAS

NOTES:

1. RAY TRACINGS GENERATED IN ACCORDANCE WITH SPEC PS-C-XFD-PRC-008, SYNCHROTRON AND BREMSSRAHLUNG RAY TRACE PROCEDURE.
2. SEE DRAWING NO. SR-FE-IVU04-1001 FOR STORAGE RING FRONT END RAY TRACE.
3. ALL ORDINATE DIMENSIONS ARE TAKEN FROM THE CENTER OF THE LONG STRAIGHT, UNLESS OTHERWISE SPECIFIED.



SPECIFICATIONS		SPEC REFERENCE
Project Name	NEXT	NX-C-XFD-RSI-001
Source	In Vacuum Undulator (IVU)	NX-C-XFD-RSI-001
Beam Line Name	In-Situ & Resonant X-Ray Studies	NX-C-XFD-RSI-001
Abbreviation	ISR	NX-C-XFD-RSI-001
Period of insertion device	24 (23) / 20(TBC)	NX-C-XFD-RSI-001
Long / Short Straight / Cell	LONG / 04-ID	NX-C-XFD-RSI-001
Canting Angle	2.0 mrad	NX-C-XFD-RSI-001
Length of Source	2800 mm / 1500 mm	NX-C-XFD-RSI-001
Location of Center of Source 1	U/S 600.56 mm	NX-C-XFD-RSI-001
Location of Center of Source 2	D/S 2676.33 mm	NX-C-XFD-RSI-001
Ray Tracing Procedure		PS-C-XFD-PRC-008 (Ver 2)
Front End Ray Tracing Drawing		SR-FE-IVU04-0001

ABBREVIATIONS:
BC - BREMSSTRAHLUNG COLLIMATOR
BS - BREMSSTRAHLUNG STOP
DCM - DOUBLE CRYSTAL MONOCHROMATOR
DHRM - DOUBLE HARMONIC REJECTION MIRROR
DS - DOWNSTREAM
FM - FIXED APERTURE MASK
FOE - FIRST OPTICAL ENCLOSURE
HFM - HORIZONTAL FOCUSING MIRROR
IB - INBOARD
MBM - MONOCHROMATIC BEAM MASK
MBS - MONOCHROMATIC BEAM STOP
MPF - MISS STEER PROTECTION FLANGE
OB - OUTBOARD
PBS - PINK BEAM STOP
PSH - PHOTON SHUTTER
RW - RATCHET WALL
SBS - SECONDARY BREMSSTRAHLUNG STOP
SOE - SECOND OPTICAL ENCLOSURE
US - UPSTREAM
VFM - VERTICAL FOCUSING MIRROR
WBS - WHITE BEAM STOP

ISR, BEAMLINE LAYOUT, 4-ID
SCALE 1/50

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN MILLIMETERS
DIMENSIONS IN BRACKETS [XX.XX] (WHERE PRESENT) ARE MILLIMETERS AND ARE FOR REFERENCE ONLY
INTERPRET DRAWING AS PER ANSI Y14.5-1994 OR Y32.2-1975

DIMENSIONAL TOLERANCES: X ± 1.500, X ± 0.750, .XX ± 0.400, .XXX ± 0.120
ANGULAR TOLERANCE: ± .5°
FINISH: 3.2
BREAK EDGES & SHARP CORNERS 0.005 MIN. TO 0.030 MAX.

THIRD ANGLE PROJECTION

NEXT ASSY:
PROJECT: NEXT

SCALE: SEE DWG VIEW

WBS# 2.07.02

BROOKHAVEN NATIONAL LABORATORY
BROOKHAVEN SCIENCE ASSOCIATES
UPTON, NEW YORK 11973
Exploring Life's Mysteries, Protecting its Future

NSLSII NATIONAL SYNCHROTRON LIGHT SOURCE II

DRAWN BY	C. LONGO	10/2/2015
CHECKED BY	C. STELMACH	10/2015
VACUUM APPROVAL		
ENGINEER APPROVAL	M. LUCAS	10/2015
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PHOTON DIVISION
ISR BEAMLINE
RAY TRACING LAYOUT

SHEET SIZE: D
DRAWING/PART NUMBER: PD-ISR-RAYT-0001
REVISION: A
ESH&Q RISK LEVEL: A1
SHEET 1 OF 7

RELEASED – EFFECTIVE